



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/591,471	06/09/2000	Richard Robert Boland	Boland 6-17-1	2775

7590 03/19/2004
Fay Sharpe Fagan Minnich & McKee
1100 Superior Avenue, 7th Floor
Cleveland, OH 44114-2518

EXAMINER

ESCALANTE, OVIDIO

ART UNIT	PAPER NUMBER
----------	--------------

2645

DATE MAILED: 03/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/591,471

Applicant(s)

BOLAND ET AL.

Examiner

Ovidio Escalante

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-16,19-26 and 29-37 is/are rejected.
- 7) ☒ Claim(s) 7,8,17,18,27 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2645

DETAILED ACTION

1. This action is in response to applicant's amendment filed on February 11, 2004. **Claims 1-37** are now pending in the present application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2645

5. Claims 1,3-6,9-11,13-16,19-21,23-26,29,30,33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over DePaola et al. US Patent 6,408,028 in view of Anderson et al. US Patent 5,940,491.

Regarding claims 1,11 and 21, DePaola teaches a method, apparatus and system for intelligent tandeming of an incoming call to an application node in telecommunication systems, (abstract), the method, apparatus and system comprising:

(a) a network interface for receiving an incoming call leg directed to a called party directory number, (col. 15, lines 4-22);

(b) a memory and processor coupled to the memory and network interface for determining a subscriber profile, (col. 15, lines 22-44);

(c) when the subscriber profile does not include a tandem parameter (e.g. indicator for calling party pays), routing the incoming call leg to the called party directory number, (col. 15, lines 59-67);

(d) when the subscriber profile includes the tandem parameter, obtaining a routing parameter (col. 15, lines 28-54; col. 16, lines 6-14);

While DePaola teaches of tandeming the incoming call leg to an adjunct network entity having an application node, (col. 16, lines 8-27), DePaola does not specifically teach when the subscriber profile includes the tandem parameter, performing digit analysis of the called party directory number.

However, the Examiner notes that it would have been obvious to perform digit analysis since the system must be able to know where to route the call to i.e. what subsequent switch or

application node if the system is able to route the caller to the application node that is associated with the called subscriber.

Nonetheless, Anderson teaches that it was well known in the art to obtain a routing parameter and having a processor perform digit analysis on the called party directory number so that the processor can determine what trunk line to select, (col. 6, lines 19-26; fig. 6).

Anderson further teaches when the digit analysis has been performed successfully, tandeming the incoming call leg to an adjunct network entity having an application node (col. 6, lines 27-37), and when the digit analysis has not been performed successfully, (failure), providing a default mode for the incoming call leg, (col. 6, lines 37-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of DePaola by performing digit analysis on the called party number as taught by Anderson so that the processor will know which outgoing trunk to select based on the called number which will allow the processor to select the trunk going to the correct application node.

Regarding claim 3,13 and 23, DePaola in view of Anderson teach wherein the default mode comprises routing the incoming call leg to the called party directory number (call completed), (col. 6, lines 37-39). As stated above, it would have been obvious to provide perform digit analysis which will provide a default mode upon failure so that the call can be completed.

Regarding claim 4,14 and 24, DePaola in view of Anderson, as applied above, teach wherein the default mode comprises providing for an announcement to be played to a calling party of the incoming call leg, (col. 6, lines 37-39). As stated above, it would have been obvious

to provide perform digit analysis which will provide a default mode upon failure so that the call can be completed.

Regarding claim 5,15 and 25, DePaola teaches wherein the tandem parameter is a predesignated value of a field in the subscriber profile, (col. 15, lines 28-44).

Regarding claim 6,16 and 26, DePaola teaches wherein the tandem parameter is included as a predesignated value of a field within an ANSI-compatible calling features indicator parameter, (col. 15, lines 28-44).

Regarding claim 9,10,19,20,29 and 30, DePaola, as applied above does not specifically teach that the routing parameter determines a selecting of a trunk group for outgoing routing or tandeming.

Anderson teaches that it was well known in the art to have a routing parameter determine a selection of a trunk group for outgoing routing or tandeming of the incoming call leg, (col. 6, lines 27-37) and wherein the digit analysis of the called directory number determines a pattern match for available trunk groups for outgoing routing or tandeming of the incoming call leg and determines a format for the outgoing routing or tandeming of the incoming call leg, (col. 6, lines 27-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of DePaola by allowing the switch to select a trunk group as taught by Anderson so that the processor will know which outgoing trunk to select based on the called number which will allow the processor to select the trunk going to the correct application node.

Regarding claim 33, DePaola teaches wherein the switching center is a mobile switching center, (fig. 1).

Regarding claim 34, DePaola teaches wherein the switching center is a wireline switching center, (fig. 1).

Regarding claim 35, DePaola teaches wherein the application node is a prepaid telecommunication service, (abstract; col. 4, line 56-col. 5, line 15).

Regarding claim 36, DePaola teaches wherein the application node is a calling party pays telecommunication service, (abstract; col. 4, line 56-col. 5, line 15).

Regarding claim 37, DePaola teaches wherein the application node is a one number telecommunication service, (abstract; col. 4, line 56-col. 5, line 15).

6. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over DePaola in view of Anderson and further in view of D'Amico et al. US Patent 5,579,379.

Regarding claims 31 and 32, while DePaola and Anderson teach of using a database for storing a subscriber profile, and of using MSC which would obviously involve the use of home location registers or visitor location registers, DePaola and Anderson do not specifically teach wherein the database is a home location register or a visitor location register.

D'Amico teaches of a calling party pays telecommunication service which stores subscriber profiles in either a HLR or VLR, (col. 5, lines 10-35). D'Amico teaches that the databases are used to store information that is related to the subscriber and so that the switch can query the database to retrieve pertinent information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Buhrmann by including a HLR or VLR and

Art Unit: 2645

allowing a node to be a CPP node as taught by D'Amico so that the switch can determine subscriber profile information in a wireless network.

7. Claims 2,12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over DePaola in view of Anderson and further in view of Applicant's admitted prior art.

Regarding claim 2,12 and 22, while DePaola and Anderson teaches of determining that the subscribe profile does not include a tandem parameter, DePaola and Anderson do not specifically teach of determining whether a trunk group of the incoming call is predesignated for tandeming.

However, in page 2 of Applicant's specification, Applicant states that in the prior art tandeming was performed both on a group basis and on an all-or-none basis for certain groups of subscriber designated by trunk groups. Applicant states that incoming call legs are automatically tandemmed to an application node while for other groups of subscriber, also typically designated by trunk groups, incoming cal legs are never tandem, the all incoming call legs always directly routed to the subscriber,

Therefore, it would have been obvious to one of ordinary skill in the art that the system of DePaola could be modified to include trunk groups that a predesignated for tandeming or trunk groups that are not predesignated for tandeming after determining that the subscriber profile does not include a tandem parameter so that the calling party can be routed to an application node or the called party based upon the called party's trunk group.

Art Unit: 2645

Allowable Subject Matter

8. Claims 7,8,17,18,27 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to claims 1-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

(703) 872-9314, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington, VA, Sixth Floor (Receptionist).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ovidio Escalante whose telephone number is (703) 308-6262. The examiner can normally be reached on Monday to Friday from 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached on (703) 305-4895. The fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [fan.tsang@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ovidio Escalante
Examiner
Group 2645
March 12, 2004

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

